



"Dedicated to Public Service"

THE RADIATOR



W6RHC

IRL #8170



P.O.Box 508 Chico, CA 95927-0508

Founded: August 13, 1939

May, 2017

Coming Events

O.A.R.S. GENERAL MEETING Second Friday, of month, 7:00 p.m., at St. Paul's Church Parrish Hall, 1430 Pine St., Oroville

G.A.R.S. Second Thursday of month, 6:30 p.m. Lutheran Church Hall, Artois; .

G.E.A.R.S General Meeting, third Friday of month, Butte County Search and Rescue Bldg., Chico. Social hour 6:00, meeting at 7:00.

Board Meetings: 2nd Saturday of month

Butte A.R.E.S. MEET: fourth Friday, at Butte County Search and Rescue Building.

FCC EXAMS - GEARS VEC

First Sunday of every even numbered month.

At the Butte County Search and Rescue Building,. Written test at 2:00 p.m. For information or pre-registration call Tom Rider -W6JS; 530-893-9211

Club Events: News and items of interest
GEARS Calendar...all inside.

**Larry
KA6GND
GEARS
530-345-**



Picture courtesy EVARC

**Marcum,
President
5399**

The Prez' Says:

QST de KA6GND

A special thank you to Dorothy Post, Evelyn Weir – K6QXC, Kathy Favor – K6FAV and Dale Anderson – KK6EVX for organizing the ham participants in this year's Wildflower Bike Ride – your work on this is greatly appreciated!



Greetings to all! This month we have one of the most fun meetings of our year - the annual GEARS Auction. At our meeting on Friday May 19th our meeting will pretty much just be the fun-filled auction. Start going through your ham-related goodies that you can part with, as it just may be that something that someone else will treasure. Bring it to the meeting and if you need to, put a minimum bid amount on it. All GEARS asks is that at least 10% of the selling price go to GEARS, as this auction is a big fundraiser for our club. Some choose to donate the entire selling price to the club – your choice. There will be at least 2 estate sales of hams that have become silent keys (passed away) and their families have donated their ham gear and accessories to GEARS. Bring your cash and/or checkbooks to the auction, there just may be one or more items that you just cannot live without in your station!

Another biggie for the year is next month – the annual ARRL Field Day. It will be held Saturday and Sunday, June 24th & 25th, location yet to be decided. This is an opportunity for us to set up stations out in the "field" under less than optimal conditions and have a great time making contacts on different bands and modes, honing our skills and meeting new friends. Mark your calendar and get in touch with Michael Favor, N6FAV if you would like to help in some way.

Hope to see you and talk with you soon,

Larry Marcum, KA6GND

GEARS Club President

Ka6gnd@gmail.com

530-345-5399

2017-04-08 GEARS Board of Director Meeting Minutes

Present: Steven Wolske, Rick Hubbard, Tom Rider, Dale Anderson, Michael Favor, Evelyn Weir

Absent: Larry Marcum, Gene Wright, Anna Horn

Meeting called to order at 9:07 AM

Only four officers and board members are present, so there is no quorum.

Secretary's Report

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Secretary has filed the California SI-100 Information form for the California Secretary of State

VEC Report

=====

Five people took the test, 2 Techs upgraded to General, and 3 new Techs

FCC has changed the procedure for the VEC to submit test results online.

Treasurer's Report

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Available Balance \$3254.36 plus encumbrance's for ARES and Repeater Capital fund.

Year end summary of all financials is available on the Google Drive to help filling out Tax Return.

Motion Needed to authorize Rick to purchase Digital Antenna Analyzer for big-ticket raffle prize for around \$350.

Motion Needed to remove Evelyn and Lester as signers on checking account in order to add Kathy Favor as a signer as discussed in a previous meeting, because there is a limit to the number of people who can be signers on the account.

Motion Needed to renew our Liability Insurance policy

Raffle

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Suggestion to make total number of tickets 200 so we can double our investment in the raffle prize. 100 tickets will barely break even.

Would like a list of auction items ("Catalog"?)

We should look into a Raspberry-PI repeater controller to replace the current Arcom controller to add additional features and additional ports.

Program Committee Suggestions

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Dale - AZ/EI antenna pointer for Satellite operations.

Scott - ARHAB - Amateur Radio High Altitude Balloon launch.

ARES Wilderness Protocol - (10-minutes Ham 101 talk / how-to).

Dale - ARES Presentation / Go-Kit presentation.

Michael - How to use the Repeater Phone Patch (10-Minutes Ham 101 talk).

Rick will Lead the General Meeting in April, filling in for Larry.

Meeting adjourned at 11:15 AM

Michael Favor N6FAV, Secretary



May 19

Bring in your cherished "oldies" give them a new lease on life!
Let them serve again!



AUCTIONS
ARE GREEN!



SALVAGE,
REUSE,
RECYCLE!

Retrospective

Morse Code: A Fading Signal?

By MIGUEL HELFT DEC. 27, 2006

[http://www.nytimes.com/2006/12/27/](http://www.nytimes.com/2006/12/27/business/27morse.html)

[business/27morse.html](http://www.nytimes.com/2006/12/27/business/27morse.html) Photo



A worker at the Central Telegraph Office of the post office in London using Morse Code in 1932, which was soon replaced by teletype machines. Credit Hudson/Topical Press Agency/Getty Images

It may be the ultimate S O S — Morse Code is in distress.

The language of dots and dashes has been the lingua franca of amateur radio, a vibrant community of technology buffs and hobbyists who have provided a communications lifeline in emergencies and disasters.

But that community has been shaken by news that the government will no longer require Morse Code proficiency as a condition for an amateur license. It was deemed dispensable in part because other modes of communicating over ham radio, like voice, teletype and even video, have grown in popularity.

While the decision had been expected, some ham radio operators fear that their exclusive club has been opened to the unwashed masses — and that the very survival of Morse Code is in question.

“It’s part of the dumbing down of America,” said Nancy Kott, editor of World Radio magazine and a field representative for the Centers for Disease Control and Prevention in Metamora, Mich. “We live in a society today that wants something for nothing.”

A woman in a mostly male world, Ms. Kott is one of about 660,000 licensed ham operators in the United States and is the American leader of Fists CW Club, an organization that calls itself the International Morse Preservation Society. (An “open fist” was the hand position typically used by telegraph operators when sending Morse, which is sometimes called Continuous Wave, or CW. And in ham radio slang, someone who sends fine code is said to have a good fist.)

This a 2006 article.....

“CW is just another mode and should not be afforded any special priority over others,” wrote K4UUG, who like many radio aficionados identified himself online using his radio call sign. “Proficiency should not be required for those who do not wish to use the mode.”

As part of its decision to eliminate the Morse requirement, the commission made essentially the same point.

Inside a hilltop trailer above Stanford University in Palo Alto, Calif., a couple of veteran coders seemed to be taking the commission’s decision in stride earlier this week. In a room cluttered with electronic equipment, they translated the dits and dahs that beeped in the background at dizzying speed, the chatter between someone in Canada, VE6NL to be precise, and someone off the coast of Antarctica, VP8CMH.

“It’s a bit like a foreign language,” said W6LD, whose real name is John Fore, a securities lawyer at Wilson Sonsini Goodrich & Rosati, a prominent Silicon Valley firm. “You learn it and it’s fun to use it.”

With thumb and forefinger barely touching the two metal ends of a Morse paddle, W6NL, a.k.a. David B. Leeson, unleashed his own stream of dits and dahs with the ease of a virtuoso, joining the global conversation. “I fell head over heels for amateur radio when I was 4 or 5 years old and heard Morse Code signals from afar at the station of a 14-year-old,” said Mr. Leeson, 69, a consulting professor of engineering at Stanford. “I still remember the thrill.”

The thrill turned into a hobby, and the hobby turned into a career in technology. In 1968, Mr. Leeson founded California Microwave, once a thriving telecommunications equipment company but now defunct. Now radio and Morse are just for fun, said Mr. Leeson, who is faculty adviser to the Stanford Amateur Radio Club, which once counted William R. Hewlett and David Packard as members.

Mr. Leeson and Mr. Fore are both active in radio contests, 48-hour competitions in which hams try to contact as many other hams as possible, often using Morse. Mr. Leeson has a station in the Galapagos Islands, where he goes several times a year with his wife, Barbara (K6BL), for contests. They once contacted as many as 17,000 other hams in a weekend. Mr. Fore, who is 50, and got his first license when he was 10, has a station in Aruba. They embody the kind of utility-free passion for Morse that the futurist Paul Saffo said would ensure its survival.

“Freed from all pretense of practical relevance in an age of digital communications, Morse will now become the object of loving passion by radioheads, much as another ‘dead’ language, Latin, is kept alive today by Latin-speaking enthusiasts around the world,” Mr. Saffo, a fellow at the Institute for the Future, wrote in his blog.

Morse Code was first devised in the 1830s for use with the telegraph. It later became an essential part of civilian, maritime and military radio communications. But the military has largely abandoned its use in favor of newer technologies, and the Coast Guard stopped listening for Morse S O S signals at sea during the 1990s.

The F.C.C. first lifted the Morse Code requirement for entry-level licenses in 1991. It later dropped proficiency requirements for higher-level licenses to five words a minute, from 20. And after international regulations stopped mandating knowledge of it in 2003, it was only a matter of time until Morse Code was no longer required in the United States. The requirement will formally be phased out sometime next year.

The demise of the Morse requirement, however, could be a boon for ham radio itself. After the F.C.C.'s decision, the American Radio Relay League, an organization representing ham radio operators, said demand for information about radio licenses surged from about 200 in a typical weekend to about 500.

"We are very pleased to see that," said David Sumner (K1ZZ), the league's chief executive.

That is no consolation for the most avid defenders of Morse.

"There is something magical about being able to put two wires together and start going dit-dit-dit dit-dit," said Ms. Kott, or WZ8C. "We are just going to have to get on the air and do what we do and hope for the best."

Morse Code After 1991 and 2006—Has it just 'faded away?'

The following are excerpted from articles by members of:
The Commonwealth Braille & Talking Book Cooperative (CBTBC)

Morse code for the Deaf/Blind and disabled

The deaf-blind often face the issue of interacting with computing devices and with the populations around them. I present here a method of using Morse code as a means of interfacing between this population and computing devices. In addition the use of Morse Code has applications in the general population as well.

While many would consider Morse code to be an antiquated communications method, it does have some advantages:

Morse code is a well established international standard (ITU-R M.1677-1)

It can be sent and received by sound, visual signals, and tactilely
It has a standard form used by all world languages.

Morse code is still widely known, it is taught to scouts, amateur radio operators and in the military.

A Morse Code keyboard

A morse code keyboard is a USB or bluetooth device that take code sent from a iambic key and converts it to standard typing. They are used by the motor impaired to type and control computers. In the past these devices have been very expensive (\$450-\$600) but they are, in fact rather simple and radio amateurs have been building them for many years.

Recently Zunkworks has developed a low cost Morse code Keyboard (\$50) which hold out the prospect of wider acceptance of this technology. <http://zunkworks.com/BluetoothMorseKeyboard>

Beyond the disabled these keyboards offer the prospect of typing in situations where conventional keyboards, physical or on screen, are not practical or safe such as in driving. Radio amateurs have, for many years, employed this method while driving to avoid the distraction of trying to work voice radios while on the road.

Samuel, a Morse code voice

A number of years ago Apple Developer Service posted a sample code of a Morse code voice, called Samuel, to demonstrate the process of building TTS voices for MacOS. Unfortunately over time this sample code stopped being buildable. I have taken that code and with the help of the original author, Matthias Neeracher, extended the voice to support both the ITU code sequences as well as the UTF-8 sequences defined by the CBTBC. This last addition done so that Samuel can "read" such symbols as ^ and |. Computer control with morse code extensions.

With this voice installed in the MacOS it is now possible to have VoiceOver speak in morse code rather than in voices. This means that the deaf-blind or other user of VoiceOver who does not have access to, or the financial means to obtain a Braille display can interact with the device. This is done by employing a resonator, for example the PureEnergy Vibe device which can be obtained for less than \$20. Similar devices could be made for much less. The user places their finger on the resonator and the code received tactilely.

Once learned the rate of transmission can be increased. Some code users report reception of up to 100 words per minute however rates of 40 words per minute are more realistic in tactile reception.

Wider use

While I envisioned this as a means of communications with the deaf-blind morse code may well have other applications extending well beyond that population. The system can be used in any situation where silent messaging is required. For example I have my iPhone transmitting the names of my contacts in morse code vibration for each contact. I can tell who is calling with the phone in my pocket.

If we were able to have the Samuel voice ported to iOS we could conceivably receive messages in silent code which would be useful in any number of situations where one might need to get a message but where looking at or hearing a message is not desired.

ARRL Hamvention Forum Topics Will Encompass Makers, Youth, HamSCI

04/20/2017

When Hamvention® opens on May 19 for the first time in Xenia, Ohio, the focus of ARRL activities will be the ARRL EXPO in Building 2 of the [Greene County Fairgrounds and Expo Center](#). ARRL will sponsor a slate of forums on all 3 days of Hamvention.

To highlight the new location, some fresh ARRL forum topics will accompany the old standards. Space is limited at some forum venues.

ARRL has reached out to the Maker movement, and “**Ham Radio Makers and Hackers**” will kick off the League’s forum schedule on Friday at 10:30 AM (Room 4). The ham radio community has always promoted the DIY (do it yourself) approach — what some hams call “homebrewing.” The panelists at this hour-long session will share experiences about how ham radio is finding kinship with the new generation of creators, makers, hackers, and innovators. Panelists will include ARRL author Glen Popiel, KW5GP, and ARRL Education & Technology Program instructor Tommy Gober, N5DUX. Also on the panel is Cara Kouse, Innovation and Makerspace Manager at the Xenia Community (continued—see column to the right)

Morse Code continued from page 4

With the advent of the Apple Watch and its vibration features the ability to both receive code silently and to be able to send messages without having to either speak or look at a keyboard becomes possible. For example code could be sent from the face of the watch itself. This is a classic example as to how a technology, originally envisioned to aid a small group of disabled persons has applications well beyond that population. Links to resources

[ITU International morse code](#) specification
CBTBC proposal for [computer control using morse code](#)

CBTBC Samuel (morse code) text to speech voice for MacOS
XThis is a text to speech voice that will send morse code rather than verbal speech it can be used with a tactile device by the deaf blind with VoiceOver screen reader or other situations where there is text to speech output. Download either the [Samuel Voice Installer](#) or the [Xcode source code](#). This version contains the morse code extensions from the link above.

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As one avid CW operator from the Samuel Morse Amateur Radio Society, Sacramento, has succinctly proclaimed “dah dit– it ain’t dead yet!”

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- Library, who will talk about the new Makerspace opened at the library early this year.
- Also new at Hamvention 2017 will be the “**HamSCI, the Ham Radio Science Citizen Investigation**” forum, Saturday at 9:15 AM (Room 4). Nathaniel Frissell, W2NAF, will answer the question, “What is HamSCI?” A group of panelists will share information about professional research programs supported by radio amateurs. Presentations also will address investigations related to the total solar eclipse in August, and Frissell will discuss “**The Solar Eclipse QSO Party**: Ionospheric Sounding Using Ham Radio QSOs.”

One popular forum at the Orlando HamCation focused on the **ARRL Collegiate Amateur Radio Initiative (CARI)**. Andy Milluzzi, KK4LWR, will bring the discussion to Hamvention on Saturday at 12:30 PM (Room 4). A growing number of campus radio clubs and student radio amateurs have begun to share ideas and suggestions on the CARI Facebook page to rekindle interest in ham radio on college and university campuses, bringing students together, and developing career connections. Students, alumni, and faculty will present at the forum. The ARRL Collegiate Amateur Radio Initiative is sponsored in part by the W1YSM Snyder Family Collegiate Amateur Radio Endowment.

“**Learning. Discovery. And FUN!**” on Sunday at 9:15 AM (Room 2). [ARRL Teachers Institute](#) on Wireless Technology instructor Tommy Gober, N5DUX, will introduce teachers to a variety of tools, as well as a curriculum to take back to their classrooms. Topics include an introduction to basic electronics, the science of radio, space technology, and satellite communication, as well as weather science, introduction to microcontrollers, and basic robotics. Gober will share strategies to motivate students to learn and to inspire interest in STEM (science, technology, engineering, and mathematics) fields.

ARRL Great Lakes Division Director Dale Williams, WA8EFK, will moderate the **ARRL Member Forum** on Saturday at 11:45 AM (Room 1). It’s an opportunity for ARRL members and prospective members to hear from local and national ARRL officials on key areas of membership interest. Learn how ARRL supports dozens of ways to get involved, get active, and get on the air.

- The wide-ranging “**Public Service Communications Panel Discussion**” on Saturday at 1:45 PM (Room 4) will offer a chance to hear from representatives of organizations active during disasters and emergencies. ARRL Emergency Preparedness Manager Mike Corey, KI1U, will moderate. There will be presentations by representatives of the VoIP WX Net and VoIP Hurricane Net; the Military Auxiliary Radio System (MARS); the Hurricane Watch Net (HWN); the Salvation Army Team Emergency Radio Network (SATERN), and the US Department of Homeland Security’s SHARES network.

(continued on page 7)

Club Officers: (Board of Directors)

PresidentLarry Marcum-ka6gnd
Vice President..... Stephen Wolske-kf6hss
Secretary Michael Favor—n6fav
Treasurer..... ..Rick Hubbard- ki6vos
Past PresidentAnna Horn Kg6goa
Director..... Tom Rider-W6JS
Director..... ..Gene Wright-wa6zrt
Director..... Dale Anderson kk6evs

Club Meetings:

General Meeting Third Friday 7:00 PM

Board Meeting Second Saturday

GEARS Club Net

Tuesdays 7:30 PM 146.850 MHz-PL 110.9

GARS Club Net:Monday,7:00 pm 147.105+Mhz
PL 110.09

Thursdays Simplex Net 7:30 p.m. 146.52

Sacramento Valley Traffic Net

Nightly 9:00 PM 146.850 MHz-PL 110.9

ARES Nets:

Butte Mondays 20:00 146.850 MHz-PL 110.9

Yuba Sutter Thursdays 19:00 146.085+MHz PL 127.3

Glenn Thursday 19:30 147.105 MHz +PL 100.0

Other Nets:

Willie Net 8:00 PM Mondays 1930 kHz

Sac Valley Section Net—7:00 PM 2nd Wed of the
month 146.085 MHz+PL 127.3

440 Wed. Night 8:00 PM Wednesday 440.650 MHz

Golden Bear 7:00 PM Daily 3975 kHz Western Public
Service System (WPSS)

7:30 PM 3952 kHz

ARISS (*International Space Station*) Uplink 144.490
MHz Downlink 145.800 MHz

Hope-1 satellite: all uplinks are in 145Mhz band:

All downlinks are in 435Mhz band

...California Traffic Net: 3906 KHz nightly @6:00

pm .For traffic listing & @6:30 p.m. for roll call.

The GEARS Newsletter Staff:

Editor and Publisher.....Dorothy Post

Printing & Distribution snail mail: Evelyn Weir

Website...Michael Favor-N6FAV

The Radiator is a monthly publication of the Golden Empire Amateur Radio Society (GEARS). It is the policy of the Editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio, of interest to GEARS members, and space is available. Please send all submissions to the Editor – Dorothy Post by the last day of the month through the following medium: E-mail: dj@posthouse.us

ARRL Hamvention (continued from page 5)

At “**Ham Radio and the Law: Antenna Permits and Problems**” on Friday at 2:45 PM (Room 2), attorney Fred H. Hopengarten, K1VR — the author of *Antenna Zoning for the Radio Amateur* — will head a panel of Amateur Radio attorneys in a discussion of legal issues to include avoiding restrictive covenants, tower permits, and recent court rulings on the PRB-1 limited federal preemption. The forum will present the latest information on H.R. 555, the Amateur Radio Parity Act of 2017.

“**ARRL National Parks on the Air Recap**” on Sunday at 10:30 AM (Room 2) will review the highly successful [NPOTA](#) activity that commemorated the centennial of the US National Park Service last year, inspiring more than 1 million contacts during park activations. ARRL Radiosport Manager Norm Fusaro, W3IZ, and ARRL Media and Public Relations Manager Sean Kutzko, KX9X, will moderate.

A [complete schedule](#) of Hamvention forums is available on the Hamvention website

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Space Weather News for May 2, 2017

<http://spaceweather.com>

<https://www.facebook.com/spaceweatherdotcom>

METEORS FROM HALLEY'S COMET: A radar in Canada has detected radio echoes coming from the constellation Aquarius. This is a sign that the annual eta Aquarid meteor shower is underway. In the days ahead ahead our planet will cross a network of debris streams from Halley's Comet, producing a drizzle of eta Aquarids numbering 10 to 30 meteors per hour in the northern hemisphere and perhaps twice that number in the southern hemisphere. Usually, the eta Aquarid shower peaks around May 6th. This year, there might be an additional enhancement on May 4th or 5th. Check today's edition of [Spaceweather.com](#) for more information and observing tips.



Date	Time	Event	Location	Contact party
Sunday, June 4, 2017 Sunday , August 6, 2017	2:00 p.m.	VEC—Exams	Butte Co. Search & Rescue Building 2591 Morrow Lane, Chico	Tom Rider 530-893-9211
Thursday May 11, 2017 Second Thursday each month	6:30 p.m. Board and General Meeting .	GARS-Glenn Glenn Amateur Radio Society \\	Lutheran Church Hall: Artois	Mike Ellithorpe 530-518-3730
Friday, May 12, 2017 Second Friday each month	General Meeting	OARS Oroville Amateur Radio Society General Meeting	St Paul's Church Parrish Hall 1430 Pine Street Oroville	Ron Osborne-kd7uhf 530 589 1834 kd7uhf@yahoo.com
Saturday May 13, Second Saturday Each month	Board meet: 9:00 a.m.	GEARS Board of Di- rectors Meet Members are Invited!	Blood Source Blood Source Bldg 555 Rio Lindo Ave	Larry Marcum, KA6GND 530 345 5399 ka6gnd@gmail.com
Friday May 19, 2017 Third Friday each month.	Open 6:00 p.m. ANNUAL GEARS HAM AUCTION	GEARS Golden Empire Amateur Radio Society	Butte County Search and Rescue Building 2591 Morrow Lane Chico	Larry Marcum, KA6GND 530 345 5399 ka6gnd@gmail.com
				

**Bring Your Old Eyeglass Wear to GEARS for the
LIONS Club Eyeglasses donation Box**

Prescription glasses, or magnifying eyeglasses, sunglasses, but no loose lens—frames are a necessity.
This is a club community effort in which all members may participate with minimal effort.
Let us FILL that box up!!!!

!Donations to GEARS are TAX DEDUCTIBLE!

We are a 501 c 3 organization, and as such, donations, cash, or materials, donated to GEARS are Tax deductible. When you donate to GEARS, be sure you receive a letter of acknowledgment from our Secretary as proof of the donation and its value for the State and Federal Tax Authorities. This is a win-win for GEARS and for you, the member or the party donating!